

REMARKS

No changes are made to the claims.

The Examiner indicated that the reply was not fully responsive because the Applicants failed to point why any of the new claims overcome the prior art of record. In reply, the Applicants note the following:

New Claims 14-20 were submitted, and support for the new claims was given on Page 25 of the Reply. Specifically, the Applicants referred the Examiner to Figures 9 and 10 and the associate description in the specification.

Furthermore, new independent Claim 14 recites, among other features, a step of monitoring and periodically obtaining a current capacity utilization of a first logical device allocated to a computer, and a step of estimating a future capacity utilization of the first logical device, the estimated future capacity utilization being calculated from the capacity utilizations periodically obtained for the first logical device. As indicated in the Reply, in arguing the patentability of Claim 1, Chellis does not teach that the predicted usage (estimated future capacity utilization) is calculated from the capacity utilization of the storage area (first logical device) obtained in the prior step. Moreover, the person of ordinary skill is not taught by Chellis that any allocated resource or predicted usage thereof pertains to a storage area or logical device of predetermined capacity from the storage area of a storage apparatus connected to the computer. Claim 1 was amended to coincide with the argument, and Claim 14 includes similar language directly supported by the argument.

In addition, although the Office Action asserts that the secondary reference to Cannon discloses a similar dynamic storage allocation system in which an estimated capacity utilization is estimated from the capacity utilization of each storage area allocated to a particular computer, and the capacity allocation to a particular storage allocation is decreased when the particular allocation is over-allocated, Cannon does not state or fairly suggest the allocation of a storage area (as opposed to a storage size) and capacity utilization thereof and does not disclose or suggest the allocation of a logical device from a storage pool of allocated logical devices, as required by Claim 14.


Each of the dependent Claims 15-20 inherits the patentable features of the independent Claim 14. In addition, neither Chellis nor Cannon, nor their combination, is seen to disclose an estimating step performed by linearly extrapolating the capacity utilization to a future time point from at least two points of monitoring and obtaining a current capacity utilization as claimed in Claim 15; if the estimated future capacity utilization is less than a maximum capacity utilization previously obtained for the first logical device, the estimated future capacity utilization is set to a maximum capacity utilization previously obtained, as claimed in Claim 16; setting the estimated future capacity utilization to the most recently-obtained current capacity utilization, as claimed in Claim 17; if the capacity of the allocated first logical device is greater than the estimated future capacity utilization by a predetermined amount, copying data stored in the first logical device to the second logical device, completing the copying before performing the step of

releasing the allocation of the first logical device to the computer, as claimed in Claim 18; reducing the size of a file system made in the first logical device before the data copying, as claimed in Claim 19; or calculating the estimated future capacity utilization on the basis of the kind of application for utilizing each logical device, access characteristics or the degree of importance of stored data in addition to the capacity utilization of each logical device, as claimed in Claim 20.

The Applicants note that, although each and every limitation of the new claims may not have been distinguished above, these arguments are believed to sufficiently address the closest prior art of record so as to satisfy the requirement of the Communication. The omission of a discussion of any particular element should not be interpreted as an admission that any such omitted elements are known to the prior art.

In view of the foregoing remarks, the Applicants request entry and full consideration of the Reply submitted February 28, 2006.

Respectfully submitted,


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